

## ***Lake Chelan Fish Consumption Advisory***

### ***Why is there a fish consumption advisory for Lake Chelan?***

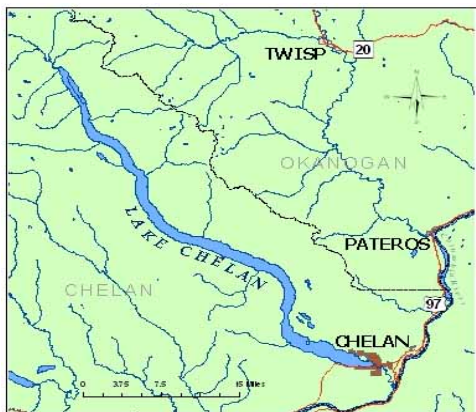
In 2005 the Washington State Department of Ecology (Ecology) completed a water quality study for Lake Chelan and Roses Lake. This study looked at DDT and PCB levels in lake trout (mackinaw), burbot, kokanee, rainbow trout, and black crappie [www.ecy.wa.gov/biblio/0503014.html](http://www.ecy.wa.gov/biblio/0503014.html). Results showed high levels of DDT in lake trout. The Washington State Department of Health (DOH) evaluated these results and has issued a fish consumption advisory for lake trout in Lake Chelan.

**DOH recommends that the general public - especially women who plan to get pregnant or are pregnant, nursing mothers, and young children should limit lake trout (mackinaw) to one meal per week.**

**Statewide Mercury Advisory** - There is an existing statewide fish consumption advisory for largemouth and smallmouth bass due to mercury for all lakes and rivers in Washington, including Lake Chelan. Women who plan to get pregnant or are pregnant, nursing mothers, and young children should limit bass to two meals per month.

### ***Where is Lake Chelan?***

Lake Chelan is located in Chelan County in central Washington. Lake Chelan is used by the public for fishing, swimming, and boating.



### ***Which fish can I eat from Lake Chelan?***

You can still catch and eat fish from Lake Chelan where fishing is allowed. Remember that fish are an important part of a healthy diet. Follow these consumption recommendations to reduce your exposure to contaminants:

#### **Fish to Limit:**

##### **Lake Trout (Mackinaw):**

One meal per week due to DDT.

##### **Largemouth & Smallmouth Bass:**

Limit bass to two meals per month due to mercury.



#### **Fish With No Limits - Enjoy!**

These fish are good choices because they are low in contaminants.

**Lake Chelan:** Burbot, kokanee, and rainbow trout.

**Store-bought Fish:** Some good choices are canned light tuna, cod, flounder, salmon, and trout.

### ***What is DDT?***

DDT is banned today, but once was used widely as an insecticide to control pests on crops and forest lands, and around homes and gardens. DDT is slow to degrade and can persist in the environment for a long period of time. DDT was banned in 1972 because it posed unacceptable risks to the environment and to human health.

### ***How does DDT get into fish?***

In Lake Chelan and other surface water, DDT binds to particles in the water and settles into the sediment at the bottom of lakes and rivers. Fish absorb DDT from contaminated sediment floating in the water and from eating other fish. DDT accumulates in the fatty parts of fish.

## *How does mercury get into fish?*

Mercury levels found in water bodies are due to natural and human activities. Products containing mercury that are improperly disposed of can contaminate soil, sediments, water, and air. Once in water, mercury can be transformed into methylmercury by bacteria. Methylmercury accumulates in the environment, moves up the food chain from the smallest life forms, into predatory fish, and then into humans who eat fish.

## *How does DDT & mercury exposure affect health?*

**DDT** — The most sensitive health effect associated with DDT exposure is liver damage. Additional health effects that have been associated with acute and chronic DDT exposure include effects to the central nervous system, immune system, and neurodevelopment. Fish consumption limits protect against the most sensitive health effect (liver damage), which assures that the public is protected against additional health effects.

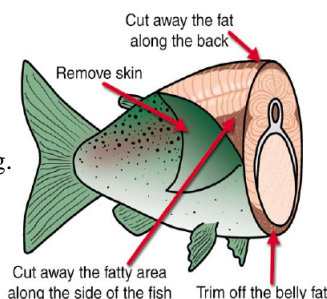
**Mercury** — The primary concern is the developmental effects on the unborn fetus or young child. Mercury has been linked to adverse effects on the nervous system that may result in learning deficits or learning difficulties later in life.

## *How can I reduce my exposure to DDT and other contaminants?*

**Choose fish low in contaminants and prepare fish properly** to reduce your exposure to contaminants, while continuing to gain the health benefits in fish.

By preparing fish the following way, you can reduce your exposure to DDT and other contaminants that collect in the fatty parts of fish by up to 50 percent:

- ✓ Remove the fat before cooking.
- ✓ Do not eat the fish skin.
- ✓ Grill, broil or bake the fish.
- ✓ Let all the fat drip off during cooking.
- ✓ Do not use the fat for gravies or sauces.
- ✓ **Mercury is stored in the fillet of the fish and will not be reduced by preparing fish this way.**



## **To reduce your exposure even more:**

- ✓ Eat a variety of fish.
- ✓ Remember to consume younger, smaller fish.
- ✓ If you eat more than the recommended amount of fish in a month, eat less the next month.

## *Should I keep eating fish?*

**Yes! Fish is healthy heart and brain food for you and your children.** The American Heart Association recommends eating two meals with fish per week. For information about fish choices that are low in contaminants visit [www.doh.wa.gov/fish](http://www.doh.wa.gov/fish).

- Fish is an excellent low fat food, a great source of protein, vitamins, and minerals.
- Fish is an excellent source of omega-3 fatty acids, which are not found naturally in our bodies.
- Omega-3 fatty acids are essential during pregnancy for the healthy development of your child's brain, retina, and nerve tissue.
- Omega-3 fatty acids help prevent heart disease by reducing blood pressure, inflammation, and blood clotting, which can prevent stroke.
- A diet that includes fish every week can help lower your risk for heart disease.

## **FOR MORE INFORMATION**

### **Questions about Lake Trout in Lake Chelan**

Contact Chelan-Douglas Health District  
509-886-6450

### **Questions about Fish Advisories**

Contact the Department of Health  
877-485-7316  
[www.doh.wa.gov/fish](http://www.doh.wa.gov/fish)

### **Questions about Lake Chelan Water Quality**

Contact the Department of Ecology  
Dave Schneider 509-454-7894  
[www.ecy.wa.gov/programs/wq/tmdl](http://www.ecy.wa.gov/programs/wq/tmdl)

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